

12 and 24 inch Stormdrain lines

On 13 Nov., 2008 Water Quality issued Notice of Violation No. 6180 to King County (County) and the City of Tukwila (Tukwila) regarding a 24" stormwater line. Both parties are connected. The pipe contains PCBs that are being released to the Lower Duwamish Waterway Superfund/MTCA sediment site. These drain lines pose actual or significant potential to recontamination to planned sediment cleanup areas and must be controlled prior to starting a cleanup. The County and Tukwila countered that they are neither owners nor operators of this storm drain line. There are two problems that must be addressed for sediment source control:

(1) Cleaning up accumulated historic contamination and

(2) Managing any on-going contamination taking this pathway to the sediments.

The Lower Duwamish Waterway Source Control Team and the Municipal Stormwater NPDES Team for NWRO request a legal opinion from the Attorney General's office regarding the validity of the County's and City's response s to the NOV. While the County's and City's response is directly related to one particular storm drain line, who is responsible for the maintenance of drain lines (who is the "operator") and who ultimately owns storm drain lines is an issue in other areas of the Lower Duwamish. If these lines do not have definitive owners or operators are they orphan sites for cleanup purposes?

- Sustaining long term source control after a cleanup at these sites is envisioned using NPDES permits to monitor and reduce recontamination potential.
- The Municipal Stormwater Permits authorize discharges from Municipal Separate Storm Sewer Systems (MS4s) which are stormwater conveyances owned "or operated" by a city or county. How we determine "operator" status will influence the implementation of municipal stormwater permit requirements.

Issues:

Generally, the issues being raised are:

- Who owns a storm drain line that starts on public property and crosses onto private property before discharging into a water body? The private property owner no longer discharges to this line. Neither the municipalities nor the private property owner admit any responsibility for maintenance of the line.
- Who are the operators of the storm drain line? Does the operator change if the private property discharges to the line?
- If the owner is different than the operator, who is responsible for the maintenance and obtaining permits of these lines? How is this determined?
- Does water drainage law circumvent or supersede water quality law or other environmental laws, as the county and city contend?
- What is the relationship between "point of compliance" under MTCA and the definition of MS4 ("owned or operated") under Municipal Stormwater NPDES Permits?
- How do the MTCA and Clean Water Act definitions of owner or operator apply to a storm drain line?
- Would other NPDES permits regulating stormwater discharges (individual or industrial general) use a different (non-MS4) legal basis for determining "operator" status?

Background:

There were two storm drains discovered along the border between Plant2 and the Jorgensen sites on the Lower Duwamish. The 2 lines are a 24 inch line and a 12 inch line.

 Both the 12 inch line and the 24" line are full of PCBs and other chemicals. The highest concentrations of PCBs in the pipes are found on private property.

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- Both stormdrain lines empty into the Duwamish near the area of the scheduled Boeing-Jorgensen bank removal and dredging projects. The bank/sediment cleanup orders do not include either of these pipes, and do not address long-term/future control.
- The 12 inch line is considered inactive. The 24 inch line is an active line being used by King County Airport and the City of Tukwila.
- The 24 inch line has 2 historical inputs now disconnected. A 6-8 inch connection from Jorgenson Forge and a 15 inch connection from Boeing Plant 2.
- In the 1990s, the City of Tukwila connected East Marginal Way storm drainage to an existing conveyance pipe under the roadway that conveyed stormwater from the King County Airport to the Duwamish (the 24 inch line).
- The 12 inch line has 1 historic input from Boeing Plant 2. The EPA verbally agreed the 12 inch line should be dealt with by Boeing as part of that sites cleanup overseen by EPA RCRA Program.
- The 24 inch line extends due east from the Duwamish River, parallel to the Boeing Plant 2/ Jorgenson property line, on the Jorgenson side of the property line. The drain line continues eastward the entire length of the properties and crosses under East Marginal Way South and continues onto King County Airport Property.
- The 12 inch line parallels the 24 inch line from the river and stops prior to the property lines along East Marginal Way South.
- An easement agreement does exist between Jorgenson Forge and Boeing Co. for the 12 inch line. No easement between any parties has been discovered for the 24 inch line.
- Judging from photos taken prior to the development of the Jorgensen property, a stream or ditch existed in an open drainage channel where the 24 inch line now lies.

Summary of Parties and Potential Connections with Source

Trying to solve the issue of eliminating the PCBS in or around the storm drain lines using MTCA raises some interesting questions and potential road blocks.

There are potentially 5 PLP's involved with this storm drain line. All 5 parties have denied responsibility for the release of the PCBs in question and responsibility for current operation (and ownership) of the active 24 inch storm drain line.

Jorgenson Forge- Owns the land the storm drain is on. Jorgenson claims they have no ownership responsibility just because a storm drain line runs through their property. Jorgensen claims they do not operate the pipe because they do not currently discharge to the pipe. Additionally there is no evidence that indicates the source of the PCBs in question originated from Jorgenson controlled property.

Boeing Plant 2- This is the most likely source of the PCBs in question. There are several documented releases of PCB on the property. There are historical pathways from Plant 2 leading to both the 24 inch and 12 inch storm drain lines. Boeing's investigatory documentation concludes that no PCB released at Plant 2 is affecting these storm drain lines. The known releases of PCB and other contaminants at Plant 2 are being managed under an EPA RCRA corrective action. Boeing's argument is that the PCB's are not theirs and the storm drain lines are not their responsibility.

Seattle City Light- Owns and operated the transformers on Boeing Plant 2 that leaked. SCL denies the PCBs in the storm drain lines are from the leaking transformers. The city has supplied evidence showing the highest level of PCB's in the transformers was 6 ppm.

King County International Airport (KCIA)- the 24 inch storm drain line is actively used by the county to convey stormwater from a portion of the airport to the Duwamish River. Limited sampling at the

airport shows elevated levels of PCBs but not to the point of explaining the levels discovered in the down gradient pipe. The County argues that their owner or operator status only extends to the Airport property line; they have no easement for the down gradient pipe. Additionally, since this area is within the city limits of Tukwila, their county authority is not applicable. At best, sampling results indicate KCIA is a contributor to a release but is not the major source.

City of Tukwila- has approximately 1000 ft of surface water drainage from East Marginal Way South that enters the 24 inch line. Recent PCB sampling shows the road side catch basins on the west side of East Marginal Way contain concentrations of PCB equivalent to numerous other catch basins previously sampled throughout the Lower Duwamish. Tukwila has indicated that under their municipal code, Jorgenson Forge is responsible for maintenance of the storm drain line located on their private property.

Conclusion:

Facts compiled so far regarding possible sources of the high PCBs in the line come from some of the previous investigations done to-date.

- Jorgensen had one connection to the line a 6" pipe that was disconnected by 1969. Recent sampling by Jorgenson at the terminus end of the 6 inch (Approximately 40 feet away from where the pipe enters the 24 inch line) pipe determined there is no PCB contamination in the soils around the pipe.
- Jorgensen owns the property the 24 inch pipe runs through. It is likely that the original owner
 of what is now the Jorgensen property channelized the existing drainage by putting in the 24
 inch line in to make better use of the property. Jorgensen's access, control, or interest
 concerning the pipe has not existed since 1969. Any legitimate Jorgensen contamination the
 pipe runs through is not PCBs.
- The only know area of PCB contamination in the immediate proximity of the 24 inch pipe is the area of the transformer pad; consequently, we do not believe we have issues with PCB inflow/infiltration to the line from Jorgensen.
- Tukwila only has a small drainage of roadway to the line, and that only since the mid-1990s.
 TV confirms the extent of Tukwila's line and sampling in the lateral shows some PCBs in catch basin sediments but nowhere near the levels seen downstream of their connection to the main line.
- King County Airport (King County International Airport, KCIA a.k.a. Boeing Field) is where the line originates and has always been connected to this line. Records & history of the KCIA-controlled portion of the drainage to this line are patchy. Although it's a relatively small acreage now, (<15 acres) it's been chopped up with construction & excavation many times over the years. Currently, KCIA shows low levels of PCBs in onsite samples from the last decade (trench drains, catch basins and pavement caulking) which doesn't strongly indicate that current KCIA conditions are a source of the highest concentration PCBs located further down gradient in the line.</p>
 - (i) What were levels historically? Assuming current levels are based on stormwater system maintenance similar to other part of the field, there's no good way of knowing.
 - (ii) How static has the drainage area been in terms of use & size? We've heard some of the Boeing Plant 2 building demolition was staged in the area. This section of KCIA has had no PCB-caulk removal.
- TV video done by Boeing for the Transformer Pad Investigation, shows old connections to Plant 2 South Yard (i.e., decommissioned in late 80's- early 90's as part of RCRA Corrective Actions). Given PCB contamination in the transformer pad area, we see two possibilities for viable pathway to the storm line -- historical contribution direct to storm drain and/or groundwater inflow/infiltration to the line.

Ecology issued a water quality Notice of Violation (NOV) on 11/13/08 to King County Airport and Tukwila. Details regarding the NOV and the response Ecology received from King County and Tukwila are listed below.

- The NOV established that Ecology views both municipal entities as "Operators" of the pipe in question because this pipe as an integral part of their storm drainage systems
- The NOV was issued for a violation of RCW 90.48.080 by discharging municipal stormwater to waters of the State via a stormwater line known to contain PCB contamination from (as yet) undetermined sources, thus facilitating the release of PCBs to the river.
- The NOV indicates that both the technology and the opportunity exist to remove most if not all of the PCB-contaminated solids from the pipe in question.
- The NOV did not address any potential PCB sources or data collected from within the City of Tukwila's right of way or the King County Airport's property. These potential sources will be addressed under adaptive management conditions in the Phase I and Phase II Municipal Stormwater NPDES Permits.
- King County and Tukwila responded to the NOV by challenging Ecology's conclusion that
 they are "operators" of the privately owned pipe because the pipe conveys municipal
 stormwater from public property to the river.
- King County provided a memorandum from Joseph B. Rochelle, Senior Deputy Prosecuting Attorney, regarding the common law of drainage in Washington State in which the condition of "natural drainage system" is discussed.
- The response to the NOV indicates that under local municipal codes, neither King County nor Tukwila would have the responsibility of maintaining the privately-owned pipe (City /County contention) in question.

Water Quality has not yet determined what formal action is necessary and is exploring other voluntary or involuntary short term solutions to removing PCB-containing material from the pipe in question. Long term source control and adaptive management solutions for the low levels of PCBs found in the on-site Airport and in right-of-way stormwater systems will be addressed under applicable NPDES permit conditions. At issue is the "operator" of the pipe once it leaves the public right of way and traverses private property, and is the owner of the pipe the private property owner if the pipe does not serve a useful purpose to the property owner.